

Infected stent graft behind the knee

Popliteal artery aneurysms are the commonest peripheral artery aneurysm and affect 1% of men aged 65 to 80 years. The popliteal artery in the main artery behind the knee and an aneurysm is where the blood vessels becomes abnormally dilated. Unlike aneurysms affecting other blood vessels, popliteal artery aneurysms rarely burst. The main problem they cause is due to the turbulent blood flow within them causing formation of blood clot. These clots can be carried to the smaller arteries in the lower leg (embolization) or cause the main blood vessel to completely block (thrombose). When this happens there is a very high change that the patient will require an amputation. In order to reduce this risk, it is recommended that popliteal artery aneurysms over a certain size be treated. The standard surgical treatment is to ligate the aneurysm and then to bypass it. More recently, it has been shown that these aneurysms can be equally well treated by relining the artery with a stent graft introduced through a small incision in the groin. This case report describes such a patient who had his popliteal artery treated with a stent graft. Unusually, after the procedure, the patient complained of a lot of pain behind the knee. The cause of this pain was not obvious but fortunately after a few months it disappeared. Four years later, the stent graft blocked but fortunately this did not cause a major problem with the blood supply to the leg. However, soon after, the patient presented with an abscess (infection) behind the same knee. This was treated by draining the abscess and antibiotics. However, the infection recurred. A special type of CT scan was then performed where the patient receives a radioactive isotope which localises to cells with a high metabolic rate (PET CT scan). These types of scans are very good at picking up sites of abnormal cell production (tumours) and activity (infections). The scan showed that the infection involved the previously placed stent graft. It is well known in surgical fields that infected prosthesis need to be removed otherwise you never get rid of the infection. Initially the patient refused to have the stent graft removed but since this publication the patient changed his mind and the stent graft was removed with some difficulty although the removal did not affected the blood supply to his lower leg so he has not had an amputation.

Stuart Robert Walker

Department of Vascular and Endovascular Surgery, Royal Hobart Hospital, Hobart, Australia

Publication

<u>PET CT to Confirm an Infected Popliteal Stent Graft Used to Treat Popliteal Artery Aneurysm.</u>
Walker SR

Eur J Vasc Endovasc Surg. 2017 Nov

1/1